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NOTICE OF ALLOWANCE AND FEE(S) DUE

466 7590 12/15/2011
YOUNG & THOMPSON
209 Madison Street
Suite 500
Alexandria, VA 22314

EXAMINER

CULLEN, SEAN P

ART UNIT

PAPER NUMBER

1725

DATE MAILED: 12/15/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,551

07/10/2006

Didier Vivien

0512-1340

3566

TITLE OF INVENTION: PROPULSION CELL FOR A DEVICE IN AN AQUATIC MEDIUM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1740	\$300	\$0	\$2040	03/15/2012

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,551 07/10/2006 Didier Vivien 0512-1340 3566

TITLE OF INVENTION: PROPULSION CELL FOR A DEVICE IN AN AQUATIC MEDIUM

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nonprovisional NO \$1740 \$300 \$0 \$2040 03/15/2012

EXAMINER	ART UNIT	CLASS-SUBCLASS
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CULLEN, SEAN P 1725 429-119000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

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Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 590 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 590 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability

Application No.

10/579,551

Examiner

Sean P. Cullen, Ph.D.

Applicant(s)

VIVIEN ET AL.

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Appeal Brief filed on 26 October 2011.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 1-20.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

/Basia Ridley/
Supervisory Patent Examiner, Art Unit 1725

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert E. Goozner (Reg. No 42,593) on December 8, 2011.

The application has been amended as follows:

IN THE CLAIMS:

1. An electrical propulsion cell for the propulsion of a movable device in an aquatic medium, comprising ~~at least~~, in a sealed body:

a first chamber forming a housing comprising an auxiliary electrical cell and a command and control module for the electrical propulsion cell;

a second chamber forming ~~a housing~~ a reservoir comprising a main electrical cell of the electrochemical type, said second chamber being provided with members for ~~the~~ controlled admission and ~~the~~ regulation of a flow of water from the aquatic medium into said second chamber, ~~which forms a reservoir, in order to form, after the command to admit water from the aquatic medium,~~ an activation electrolyte for activating said main electrical cell after a command to admit water from the aquatic medium; and

a third chamber forming a second housing comprising a module for triggering the admission by suction of water from the aquatic medium and ~~the~~ a discharge by escape of effluents resulting from ~~the~~ a chemical reaction of the main electrical cell into the aquatic

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medium, from an admission valve and an escape valve, respectively, which are mounted in said third chamber, said command and control module of the electrical propulsion cell programmed to permit-permitting the an activation of said auxiliary electrical cell in order to generate electrical energy temporarily during a stage of launching said movable device in ~~an~~ the aquatic medium, and ~~the a~~ triggering of the admission by suction of water from the aquatic medium and of the discharge by escape of effluents in order to produce electrical energy from said main electrical cell during a cruise phase,

wherein the auxiliary electrical cell ~~directly supplies~~ is configured to directly supply electrical energy to an engine for the propulsion of the movable device and all other members of the electrical propulsion cell during the stage of launching.

4. The electrical propulsion cell according to claim 1, wherein said members for the controlled admission and the regulation of ~~a the~~ the flow of water from the aquatic medium into said second chamber comprise ~~at least~~:

a motor-driven pump unit, a suction nozzle of said pump unit is connected to said admission valve, and an outlet nozzle of said pump unit delivers the water sucked in from the aquatic medium directly into said second chamber ~~forming a reservoir~~, in order to form said activation electrolyte and to immerse said main electrical cell in the activation electrolyte;

a thermostatic valve connected to said main electrical cell, said thermostatic valve regulating admission of said activation electrolyte into said main electrical cell in order to trigger the activation of said main electrical cell by electrochemical reaction; and

a device for ~~the~~ circulation of the activation electrolyte and ~~the~~ separation of the effluents, said device for circulation of the activation electrolyte and separation of the effluents

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comprising an inlet nozzle connected to ~~the~~ an internal cavity of said main electrical cell, containing the activation electrolyte, a first outlet nozzle connected in ~~the~~ a vicinity of the suction nozzle of the motor-driven pump and a second effluent outlet nozzle connected to said escape valve located in said third chamber.

5. The electrical propulsion cell according to claim 4, wherein said second effluent outlet nozzle of said device for circulation of the activation electrolyte and separation of the effluents is connected to said escape valve located in said third chamber by means of a mode valve which permits ~~the a first~~ orientation, in a first position, of the effluents towards the escape valve when the main electrical cell is started up during the ~~launch phase~~ stage of launching, and, ~~respectively, in a second position,~~ permits a second orientation of the activation electrolyte towards the suction nozzle of the motor-driven pump, in order to generate a closed-loop circulation of the activation electrolyte in the main electrical cell during the cruise phase.

6. The electrical propulsion cell according to claim 4, wherein said thermostatic valve is formed by a three-way valve receiving:

a direct flow of the activation electrolyte drawn from said second chamber ~~forming a~~
~~reservoir~~, and

a derivative flow of the activation electrolyte passing by way of a heat exchanger, the derivative flow being maintained at a substantially constant temperature by said heat exchanger, said thermostatic valve delivering, from said direct flow and said derivative flow at the ~~a~~ substantially constant temperature acting as a reference temperature, a flow of thermostatically-controlled activation electrolyte at a second substantially constant temperature to the internal cavity of said main electrical cell.

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8. The electrical propulsion cell according to claim 7, wherein said main electrical cell of the electrochemical type is formed by:

an electrochemical block constituted by a stack of AgO-Al electrochemical couples located in a cavity of a sealed module connected, ~~on the one hand,~~ to said thermostatic valve and, ~~on the other hand,~~ to said device for ~~the~~ circulation of the activation electrolyte and separation of the effluents;

a reserve of anhydrous sodium hydroxide, said electrochemical block and said reserve of anhydrous sodium hydroxide being located in said second chamber ~~forming a reservoir~~.

9. The electrical propulsion cell according to claim 8, wherein said anhydrous sodium hydroxide reserve is constituted by a mixture of micropellets of anhydrous sodium hydroxide and powder-form stannates charge in bulk into said second chamber ~~forming a reservoir~~.

10. The electrical propulsion cell according to claim 1, wherein said sealed cell body is formed by an assembly of elements constituted ~~at least~~ by:

a front collar;

a front end of the main electrical cell[[,]];

said front collar and said front end forming said third chamber;

a central shell;

a rear end[[,]] of the main electrical cell;

said central shell and said rear end forming said second chamber; and

a rear collar[[,]];

said rear end and said rear collar forming said first chamber.

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11. The electrical propulsion cell according to claim 10, wherein said central shell ~~at least~~ is constituted by a metal alloy which conducts heat, a portion ~~at least~~ of said central shell which is located in ~~the~~ a vicinity of said main electrical cell constituting a heat exchanger with said aquatic medium, ~~to form a heat exchanger~~ for at least a derivative flow of the activation electrolyte.

12. The electrical propulsion cell according to claim 10, wherein the front collar, the front end of the main electrical cell, the central shell, the rear end of the main electrical cell and the rear collar are composed of a metal material, an external face thereof which is to be in contact with the aquatic medium being provided with a protective anti-corrosion layer obtained by hard anodic oxidation.

13. The electrical propulsion cell according to claim 10, wherein ~~an~~ internal ~~face~~ faces of the front end of the main electrical cell, ~~of~~ the central shell and ~~of~~ the rear end of the main electrical cell constituting said second member ~~forming a reservoir~~ comprise a chemical nickel coating for protection against corrosion by ~~the~~ anhydrous sodium hydroxide.

14. The electrical propulsion cell according to claim 11, wherein an internal face of said central shell, except for the portion forming the heat exchanger, ~~also~~ comprises a thermally insulating coating at ~~the~~ a portion forming the reservoir for the activation electrolyte, in order to reduce ~~the~~ cooling of the ~~stored~~ activation electrolyte in the reservoir by heat exchange with the aquatic medium during the cruise phase.

15. The electrical propulsion cell according to claim 10, wherein said sealed cell body is provided with a double sealing barrier with respect to said aquatic medium;

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a first sealing barrier formed by a first seal between the aquatic medium and the first chamber, and the third chamber respectively;

a second sealing barrier formed by a second seal between the first and second chamber and the second and third chamber respectively.

16. The electrical propulsion cell according to claim 10, further comprising:

a plurality of temperature sensors for flow of the activation electrolyte entering and leaving the main electrical cell, in order to be able to regulate the temperature of the flow of the activation electrolyte by means of ~~said~~ a thermostatic valve;

a plurality of sensors for sensing ~~the~~ relative-pressure pressures of the activation electrolyte in the second chamber ~~forming a reservoir~~, ~~[[of]]~~ and the activation electrolyte at an inlet of ~~the~~ a device for ~~the~~ circulation of the activation electrolyte and separation of the effluents, said sensors of the ~~relative-pressure pressures~~ delivering ~~[[a]]~~ relative pressure-value values with respect to ~~the~~ a pressure outside the sealed cell body;

~~a plurality of contacts~~, a first contact for sealing the admission valve for the admission of water from the aquatic medium, and a second contact for opening the admission valve for the admission of water to the sealed cell body.

18. The electrical propulsion cell according to claim 17, wherein the front collar and the rear collar each have a distal end with is open with respect to the front end and the rear end of the main electric cell, respectively, ~~of the cell~~ in order to construct said electrical propulsion cell, ~~on the one hand~~, in the form of an independent module which can be stored as a substantially inert component with ~~its~~ a charge of anhydrous sodium hydroxide reserve when the electrical propulsion cell is not mounted with the movable device, ~~and, on the other hand, or~~ in the form of

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an element integrated directly in ~~the~~ a body of the movable device, the distal end of said front collar being secured mechanically and coupled electrically to an active portion of the movable device, the distal end of the rear collar being secured mechanically and coupled electrically to ~~the~~ a propulsive and control rear portion of the movable device in order to constitute ~~an~~ the electrical propulsion cell which can be activated as soon as the movable device is launched.

19. The electrical propulsion cell according to claim 1, wherein the electrical propulsion cell is combined with one of the following ~~in combination with one of the following movable devices~~ a torpedo, a reconnaissance submarine or a surface device, said electrical propulsion cell providing ~~the~~ a supply of power to, ~~the~~ propulsion and ~~the~~ control of said movable device.

2. The following is an examiner's statement of reasons for allowance:

The closest prior art of record is Tribioli et al. (U.S. 5,506,056 A).

Tribioli et al. discloses an electrical propulsion cell (1; see electrolyte-activated battery, abstract) for the propulsion of a device in an aquatic medium (abstract), comprising at least, in a sealed body (2) a chamber (3) comprising an auxiliary electrical cell (29) and a command and control module (199) for the electrical propulsion cell (see electrolyte-activated battery, abstract); a chamber (3) comprising a main electrical cell (7) of the electrochemical type (see electrochemical cell, C3/L1-3), said chamber (3) being provided with members (9) for the controlled admission and the regulation of a flow of water from the aquatic medium into said second chamber (C3/L12-17), which forms a reservoir (8), in order to form, after the command to admit water from the aquatic medium, an electrolyte (E) for activating said main electrical cell

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(C3/L1-3); a module (Fig. 2) for triggering the admission by suction of water from the aquatic medium and the discharge by escape of effluents resulting from the chemical reaction of the main cell into the aquatic medium (C3/L25-32), from an admission valve (16) and an escape valve (17), respectively, said command and control module (199) of the electrical propulsion cell permitting the activation of said auxiliary electrical cell (29) in order to generate electrical energy temporarily during a stage of launching said movable device in an aquatic medium (C3/L40-42), and the triggering of the admission by suction of water from the aquatic medium (C8/L21-31) and the discharge by escape of effluents in order to produce electrical energy from said main electrical cell (7) during a cruise phase (C8/L57-C9/L8) to separate the auxiliary cell and command and control module from the reservoir (8) to protect them from the electrolyte (E).

Tribioli et al. does not disclose, suggest or teach the following distinguishing feature(s):

An electrical propulsion cell wherein the auxiliary electrical cell directly supplies electrical energy to an engine for the propulsion of the movable device and all members of the main electrical cell during the stage of launching.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Cullen, Ph.D. whose telephone number is (571)270-1251. The examiner can normally be reached on Monday thru Thursday 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on 571-272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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